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ABSTRACT

This report presents a strong argument and general guidelines for the development of a Management Information System (MIS) for the Community College System of Connecticut. Also included are ideas to assist state budgeting and finance officers in making a Planning, Programming Budgeting System (PPBS) an effective operation in that state. Part I of the report discusses advantages for community colleges and public higher education in Connecticut of using MIS and PPBS. The importance of MIS is in providing readily available information needed in implementing PPBS. PPBS can make a great contribution to policy decision-making through providing a means for establishing and evaluating the performance of program goals. Part II deals with information which can be provided by MIS regarding use of faculty, staff, space utilization, and an accounting system. Part III presents steps for implementing MIS and PPBS which include the consolidation of information as it moves upward from the college unit through the central office, the Commission for Higher Education, and finally, the state offices. (RN)

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A PROPOSAL FOR A MANAGEMENT INFORMATION SYSTEM AND A PLANNING, PROGRAMMING, BUDGETING SYSTEM FOR THE REGIONAL COMMUNITY COLLEGES OF CONNECTICUT

By SEARLE F. CHARLES

Introduction by ROBERT L. BREUDER

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LOS ANGELES

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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

DEPARTMENT OF HIGHER EDUCATION
FLORIDA STATE UNIVERSITY

GENERAL CONCEPTS AND TENTATIVE PROPOSALS

for the

DEVELOPMENT OF A MANAGEMENT INFORMATION SYSTEM

and a

PLANNING, PROGRAMMING, BUDGETING SYSTEM

for the

REGIONAL COMMUNITY COLLEGES OF CONNECTICUT

In cooperation with the

COMMISSION FOR HIGHER EDUCATION

with the participation of

RELATED STATE AGENCIES

by

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Executive Officer

Introduction by

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INTRODUCTION

by
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The need for developing a Management Information System (MIS) and a Planning, Programming, Budgeting System (PPBS) at the local, state, and national level has become increasingly evident during the decade of the seventies. In the report that follows, Dr. Searle F. Charles, Executive Officer for Regional Community Colleges in Connecticut, presents a strong argument and general guidelines for the development of a MIS for the Community College System of Connecticut, as well as ideas to assist state budgeting and finance officers in making a PPBS an effective operation in that state.

In the fall, 1970, Dr. Charles, recognizing the urgency of instituting a MIS in Connecticut that would provide essential information for the successful state-wide operation of its community colleges, turned to the Florida State University/University of Florida Center for State and Regional Leadership for an in-service grant that would permit him to visit the Western Interstate Commission for Higher Education (WICHE) at Boulder, Colorado, the University of Florida at Gainesville, and The Florida State University and Florida Division of Community Colleges in Tallahassee for the purpose of identifying and collecting literature and other resource material relevant to his area of

research as well as meet with selected personnel currently involved in the MIS and PPBS development.

The FSU/UF Center is operated as a joint cooperative project by the Department of Higher Education, The Florida State University and the Institute for Higher Education, The University of Florida. The FSU/UF Center is financed in part by a four-year grant from the W. K. Kellogg Foundation and has as its primary objective fostering the improvement of state agencies directly or indirectly responsible for the development of community/junior college education. State agency officials or their designee who desire to identify and devote attention to an issue or problem related to community/junior college education within their state, as did Dr. Charles, which has potential applicability for other states throughout the nation are encouraged to take advantage of the short-term in-depth training opportunities provided by the FSU/UF Center through its W. K. Kellogg grant. In addition to providing the in-service training opportunities to state agency officials, the FSU/UF Center provides secretariat, research, and program planning services to the National Council of State Directors of Community/Junior Colleges and to its Standing Committees.

Research of the nature conducted by Dr. Charles for Connecticut is also being undertaken nationwide by the

National Council of State Directors of Community/Junior Colleges. State directors of community/junior colleges have been in the foreground of the MIS and PPBS movement for some time, since they have continually recognized this to be a national issue. Among the concerns of state directors of community/junior colleges is the collection of data regarding the various activities of the institutions for which they may be responsible. Unfortunately, such data has not been available in a uniform manner, which has made the usefulness of such information among states highly unreliable. Thus, the need for a MIS which can serve the needs of all states becomes evident.

In November, 1971, the National Council met in Clearwater Beach, Florida, at which time the MIS Committee approved implementing a target project under the guidance of the FSU/UF Center to develop a pilot operational state-level MIS for community/junior colleges. The objectives of the MIS project are to:

1. determine in as detailed fashion as may be necessary the information which state directors need in order to be effective in their responsibilities;
2. identify that information which is currently being collected by existing agencies and to determine

whether these data may be made available more readily and in a more useful form for the state directors;

3. determine what information state directors need that is presently not being collected or what needs remain unserved;
4. devise a simple yet complete format for making the data available to the state directors.

At a meeting held in Jacksonville, Florida, in April, 1972, the National Council MIS Committee and the FSU/UF Center agreed that the Center should analyze and synthesize the MIS materials from nine states (Kentucky, Minnesota, Virginia, Washington, California, Illinois, Iowa, New York and Florida) initially. In addition, MIS materials from WICHE (NCHEMS), HEGIS, and the Florida and Arkansas Divisions of Community Colleges were obtained and carefully reviewed. The MIS information gathered as a result of analyzing and synthesizing the above materials was presented to the National Council's MIS Committee at Raleigh, North Carolina, on June 28, 1972.

The MIS forms developed by the FSU/UF Center subsequent to the Raleigh meeting are designed to collect information in six areas:

1. Student Characteristics
2. Personal Information
3. Program Information
4. Site and Facility Information
5. Financial Characteristics
6. General Information

An invitational meeting for state MIS or fiscal officers was held in Gainesville, Florida, on June 25-27, 1972. At that meeting state MIS and fiscal officers were asked to review and criticize the information presented in the MIS forms developed by the FSU/UF Center since the Raleigh meeting in terms of content and applicability within their state. They were requested that their review consider whether the information solicited is available within their state system, and whether they believe the information being collected is worthwhile for use on a state and national level.

The FSU/UF Center reworked the MIS forms presented at the Gainesville meeting and expects to distribute them to state directors of community/junior college for review and critique early in August, 1972. Subsequent to the return of these forms from the state directors in early September, the Center will make the necessary recommended

changes in tim to implement the pilot MIS project nationally during the fall quarter, 1972. Data collected through the use of the newly developed MIS forms will be tabulated and analyzed by the FSU/UF Center and reported to the National Council of State Directors at the November 2-3, 1972 meeting in San Diego, California for further analysis and discussion.

ACKNOWLEDGMENT

My appreciation for support for my study in Planning Programming, Budgeting System and Management Information System development is hereby extended to the W. K. Kellogg Foundation; to Dr. Louis W. Bender, Director of the Center for State and Regional Leadership at Florida State University; to Dr. James Wattenbarger, Director of the same Center, as well as the Institute of Higher Education at the University of Florida; to staff at the Western Interstate Commission on Higher Education in Boulder, Colorado; and to Dr. Lee Henderson and his staff of the Florida system of Community Colleges

Within the state of Connecticut, helpful information and support have been provided by the Board of Trustees of Regional Community Colleges and by Dr. Kenneth H. Summerer, Associate Executive Officer for Development and Administration of that Board's staff.

by
Dr. Searle F. Charles
Executive Officer
Connecticut Regional Community Colleges

CONNECTICUT REPORT

Connecticut Community Colleges had an enrollment of over 18,700 students in October, 1971 (head count). This number will increase to over 19,000 in 1972, and a reasonable estimate for 1975 is 26,000. Teaching faculty have increased from 317 in 1968 to 591 in 1971-72. It will likely reach 1,200 by 1975. The operating budget in 1971-72 was $13,000,000. Without including any inflation percentage, the budget should be $26,000,000 in 1975. Capital projects should involve an annual expenditure increasing from $8,000,000 currently to $20,000,000 each year for the years 1975 through 1978. New curricula will need to be developed at all of the colleges, especially in vocational/occupational areas, and within these general areas, considerable attention will need to be given to allied health and nursing programs. These curricula in some cases will be nearly double the cost per student to provide than are the traditional liberal arts courses for the freshman-sophomore years.

If the Community Colleges in Connecticut are funded equal to two-thirds of what the normal projected demand indicates, this means that in 1980 they would be serving about 35,000 students (fall semester count), have a professional staff of 1,750 for the system, an annual budget

of $37,000,000 and capital project expenditures of over $130,000,000 completed or under way.

The above figures converted into reality by 1975 and 1980 will mean a financial commitment of considerable magnitude by the people of Connecticut. If such an investment of tax money is made by the Connecticut taxpayer, it becomes the responsibility of the governing board and its staff to program and budget as creatively and carefully as possible, to review policies and operative processes frequently, and to provide an effective means for evaluation of performance of the staff and of the product, the graduates and the students who attend our colleges and leave without graduating. At this time, the governing board, the staff of the Community Colleges, and the staff of related State agencies do not have the means to develop policy, programming, budgeting and evaluating as they should be done, as they know they should be done, and as they would prefer to do them.

Education as now defined by the expectations of our society is so involved, complex and encompassing that no single individual, group, institution or agency can do its tasks without assistance from other agencies, the use of new machinery (hardware), and the employment of data processing/computer specialists.

At the same time the public is demanding that education relate more than ever before to the needs, problems and aspirations of society (environment, population, complexities of organization, the disadvantaged). At the same time, the available public financial resources are becoming apparently more limited. The demands for programs and services exceed the supply of tax dollars. In addition, the portion of an annual budget over which the governing board, the Legislature and the executive branch have effective control is often a minor part because of the legal and moral commitments of past policy decisions.[1]

I believe the abilities of present staff and boards--their accumulated experience and know-how--provide valuable resources with which to meet our challenges of today and of tomorrow. We should not underestimate what we are doing and what we can do. Yet it is certainly evident we need better processes and more information in the midst of the demands and the complexities of problems if we are to cope successfully in meeting the challenges before us.

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[1] Miller, Donald R., An Introduction to and Background for PPBS in Education, report submitted to the U.S. Office of Education, Department of Health, Education and Welfare, April, 1970.

PART I: LIKELY VALUES FOR CONNECTICUT COMMUNITY COLLEGES AND PUBLIC HIGHER EDUCATION WITH MIS AND PPBS SYSTEMS

Two new processes or systems of developing, organizing and storing information valuable to our reasoning powers which currently seem to have the most potential are the Planning, Programming, Budgeting System and the Management Information System.

The value of the PPBS[2] is its great contribution to policy decision-making. It makes more effective the input-output transformations and the resultant organization of goals, performance of the goals, and eventually, the evaluation of performance--programs fulfilling goals! Various choices in decision-making can be more quickly and intensively and extensively evaluated before making the key policy decisions. The vast input of information provides a process and means to check performance more than we have usually done in the past.

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[2] A Planning-Programming-Budgeting System (PPBS) is an integrated and systematic means for improving public policy decision-making in society and its component organizations as defined by Donald R. Miller in An Introduction to and Background for PPBS in Education (report submitted to the U.S. Office of Education, Department of Health, Education and Welfare), April, 1970.

When developed, PPBS should provide for:

1. the identification of major program needs and/or problems;
2. the determination of specific objectives to meet needs and/or resolve identified problems;
3. the establishment of priorities among several competing and valuable objectives;
4. the development of alternate means to accomplish objectives; and
5. the determination of the degree to which objectives have been attained.

To sum up, PPBS should provide the means to achieve better management.

The Management Information System has importance in providing the means to have readily available information (storage and retrieval capability) needed in carrying out the PPBS. The MIS involves a data systems base sufficiently coordinated and defined in the gathering and storage of information to allow for consistent and reliable input into the PPBS and also for the compiling of varied statistics, reports, or studies for the colleges collectively or in sub-groups or individually.

The main areas of compilation include student information, facilities information, academic information,

community service or non-credit information, and cost analysis and budgeting information.

The Connecticut Community Colleges presently do not have any system-wide data bank in operation. We do have some student information through the use of an automated business system. This information has not, however, been compiled on a system-wide basis. We know a considerable amount about the general fund operations of the colleges, but we have no data process or equipment on which this is recorded or stored for quick and efficient use. The Commission for Higher Education has information through the Higher Education General Information Survey reports for the system and has a reasonably accurate account of space (facilities) and the use thereof. This does not, however, feed in well as yet to our system in a readily useable manner.

Today and in the years ahead, we need information drawn from consistent data from our colleges and other units of State government which will:

--provide extensive information about the incoming student, partly for purposes of effective personal and academic counseling and also to measure better his success or failure as a product of his and our efforts;

--clearly show the average cost to educate a full-time student per year;

--provide the cost of offering each course;

--provide the cost of offering each academic major;

--provide information on the cost respectively of administration services, faculty, community services;

--provide means to follow up, to check the successes and failures of graduates of various programs in finding and holding jobs, and if possible, the degree of success on the job;

--indicate the future occupational needs in the state;

--provide accurately estimated inflationary or deflationary economic factors for cost projections;

--indicate regional and national economic and employment trends.

The Community Colleges staff and the Board of Trustees and the Commission for Higher Education need similar types of information from the other units of public and private higher education, for only with this kind of information can we really answer with a sufficient degree of accuracy the questions of the taxpayer as to our efficiency and our success in producing what society needs.

As a means of indicating more clearly the likely values of PPBS-MIS development, I am listing below several of the

results possible once implemented in Connecticut's public higher education systems, particularly as it relates to Community Colleges.

PPBS and MIS, once implemented, should:

1. place decision-making in planning and programming activities into the framework of an accurate and complete set of facts and forces of influence on the Community Colleges of Connecticut, the other units of higher education in Connecticut, and related State agencies;
2. develop processes including data element dictionaries for collecting and storing information which can be used effectively by the Community Colleges, the other public higher education units, the Legislature, and the various agencies of the executive branch of our State government;
3. provide means to increase the capabilities of staff throughout the Community College system and the governing board in determining success or failure in the attainment of established objectives (accountability);
4. increase effectively the quantity and quality of input so priorities can be determined and established more easily and with a higher degree of

relationship (a) within a college, (b) to individual college needs, and (c) to societal needs;

5. connect and relate more effectively planning/programming/budgeting with policy-making and evaluation of performance;
6. make consideration possible of a greater number of alternate policies and decisions with more complete and reliable back-up information for each;
7. provide facts for the allocation of scarce resources of funds, staff and facilities more effectively among highly competitive demands of colleges, systems of higher education, State agencies and the citizens;
8. encourage the Presidents, Executive Officer, and the governing board to formulate objectives and make certain the programs and activities of the Community Colleges relate to those objectives;
9. provide for the translation of existing budgetary and accounting systems into a program budget which will show the resource requirement and the output of each program.

PART II: MANAGEMENT INFORMATION SYSTEM FOR THE SYSTEM OF COMMUNITY COLLEGES[3]

A study of materials and conversations with individuals already involved in the development of PPBS-MIS indicates that for a system of colleges the development and operation of a management information system is fundamental to participating actively, effectively, and with relative ease, in a planning, programming, budgeting system. Several reasons exist for this, best summarized by saying much of the information and method of input for a successful PPBS is built on an effective MIS. In addition, a management information

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[3] For individuals reading this paper who are unfamiliar with the basis organization of the Community Colleges in Connecticut, I shall summarize briefly the structure. The eleven Community Colleges of Conn. (April, 1972) are governed by a Board of Trustees (12 members appointed by the Governor), which includes all personnel, academic program and budget control as key responsibilities. The Board of Trustees is assisted by the Executive Officer for the system and a Central Office staff. The President of each college reports to the Executive Officer, although direct written and verbal contact by Presidents with the Board is not discouraged, and in some areas is encouraged. Regional Advisory Councils advise the Board and the Presidents on program development for each college and assist in other ways (i.e., scholarship money). The Commission for Higher Education coordinates the planning and development of all public higher education in Connecticut; therefore, some matters such as site location for a college and new academic programs must be approved by the CHE. The CHE is not, however, involved in the budget operation of the colleges or in personnel matters.

system for a system of Community Colleges provides a reservoir of information valuable to the Community College system itself and to each of the colleges.

The MIS, once developed, can provide the colleges, the Central Office staff, and the related State agencies (i.e., the Budget Office and the Commission for Higher Education) with information of which the following list is typical rather than necessarily complete:

Faculty:[4]

1. instructor's name
2. instructor's social security number
3. full-time teaching equivalency status
4. number of sections taught
5. number of course preparations made
6. number of credit hours taught
7. total number of students taught; number of students per section
8. student contact hours
9. course numbers involved (making courses taught easily identifiable)

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[4] In the Minnesota system, this information is developed by their Faculty Correction Register and the master worksheet. These are available as examples in the office of the Executive Officer, Dr. Searle F. Charles, Hartford, Connecticut.

10. course title (making courses taught easily identifiable)
11. section numbers
12. clock hours involved
13. frequency and time of class meeting

The information thus compiled can be used to audit the utilization of existing instructional staff and to assist in the projection of future staff needs. More than this, part of this information becomes a vital part of the cost analysis process which can be very important to each President in developing priorities and in evaluating efficiency of academic programs, and likewise for the Executive Officer and the Board of Trustees. Coupled with input as to faculty salaries and operational costs of plant, it allows for the development of a reasonably reliable cost figure for the offering of each course. The cost of each course becomes one of the most, if not the most, valuable information inputs for each college President, the Executive Officer, and the State Budget Office (although in the latter instance, State budget is involved usually more with total program cost rather than with individual program cost).

Space allocations and efficiency in utilization of space are important responsibilities in day-to-day operations of the Presidents and Deans of the Colleges.

Efficient use of space is of great importance to the governing board for at least two major reasons. One, cost of space is a major part of the total cost of having a college. Two, how space is being used, combined with projected academic programs and student services, provides the base of arriving at amount of space and type of space needed in the years ahead. A fully developed MIS will provide the following information in an easily accessible and useable manner:

1. room number
2. seating capacity
3. type of seating
4. square footage of room
5. square footage per seat
6. course description
7. meeting days
8. meeting hours
9. total time room is occupied each week
10. number of students using the room
11. potential utilization of room
12. actual utilization of room[5]

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[5] In the Minnesota Community College system, this is done by the Master Schedule Worksheet. Samples are on file in the Executive Officer's office (S. F. Charles, Hartford).

The incoming student profile, activities while enrolled, and a post-student record are essential planning, programming, budgeting and evaluation of on-going programs and functions. Input in this area can be overdone, particularly on an incoming student and while a student, thus loading the retrieval bank with a considerable amount of unused information. There must be considered by the staffs of the colleges and the Central Office staff, therefore, a vast array of possible information with resultant listing of what is to be collected as that information is really essential to the colleges, the Community College system and related State agencies. Only if and when there is additional time by staff and in the use of machinery should non-essential items to the entire operation be added; however, it should be stressed that from the beginning, sufficient cooperative planning in the establishment of a data element dictionary for student information should occur so that additional items of information can be included and subsequently used.

There are various patterns available in organizing the student information bank. The Minnesota Community Colleges (November, 1970) have divided their compilation as follows: Freshman Profile Report, Student Non-Resident

Report, Enrollment Summary, Student Follow-up Study. In Florida, a comprehensive booklet, Data Element Dictionary for Student Information, was developed for use by the Community Colleges. This material is organized into three priority areas so that attention can be given to the more immediate items of concern. Priority 1, for example, consists of information (elements) which "are seen as the absolute minimum base that can assist" in reaching the established goals, goals similar to those listed earlier.

Since the Connecticut system of Community Colleges will presumably need to start at a similar point, I shall list the criteria used by Florida in determining Priority 1 elements.[6]

These elements are:

1. essential for resources allocation decision-making;
2. currently being kept in some form by most of the Community Colleges in the state and have proven to be of value;
3. relatively inexpensive to collect and store and have a high effectiveness/cost ratio;

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[6] DATA ELEMENT DICTIONARY FOR STUDENT INFORMATION, Florida Community Colleges, Schafer, p. vi.

4. required by State and Federal agencies from the Community Colleges.

Obviously, Priority II and III items are those not involved in Federal-State reports, are more difficult to obtain, require more change-over from present practices and may in some instances not have State budgeting, State financing, or even system-wide need or application.

The Data Element Dictionary for Student Information as developed by Schafer and others in Florida, provides for a vast amount of input about students: background, academic and student activity patterns as a student, counselling information. It uses the COBOL and Fortran systems. The system and material developed in and by the Data Element Dictionary for Student Information is suggested as a guide for similar compilation and storage of information by the Community Colleges of Connecticut. The vast amount of information such a system can provide is too extensive for listing here; however, a very much abbreviated listing is given so at least an insight as to the possibilities is provided. This information in some way is important in one of the areas of admission, academic counseling, personal counseling, cost analysis, student activities, and post-student activities.

1. Personal Information: name, social security number, age, sex, level of parents' education local address, race, occupation of parents, number of brothers and sisters, etc.
2. Test Information: high school test types and scores, non-academic tests in admissions and in college.
3. Previous Education: high school, colleges, grade point average in high school, year graduated from high school, last high school attended.
4. Current Attendance and Activities: courses enrolled in, grade point average, level, current or expected major, semester hours attempted, earned.
5. Follow-up: four-year colleges, two-year colleges, military, employment type and earnings, unemployment record, housewife, vocational school, grade point average at succeeding colleges, reasons left.

The above are in practice divided into over one hundred items which can be coded, processed and stored. One vital task early in the development of setting up the data element bank for student information, as stressed earlier, is to establish a priority list. To do this, each college and the Central Office staff of the Connecticut Community Colleges should establish and maintain for a period of two or

three months a check list which will show what elements are actually in practice needed and used. Those appearing less frequently should not be given immediate consideration. They should be set aside until a later time.

Combined with the compilation of information about use of staff, faculty, space, and students must be the operation of an accounting system which can accurately assign other types of operational and capital project costs, if needed, to the various academic programs, student services, community service programs, and general administration. This system must certainly also relate effectively to the general accounting system of the State, the development of information for the Commission for Higher Education, Federal reports, and the State PPBS.

Tom Baker of the Florida Community Junior College Central Office points out the great value of developing an accurate cost figure for each course offered. As he correctly points out, from this basic figure many other cost figures can be secured. Examples include costs of operating a department for a year and cost of producing a two-year graduate in a particular academic major. It can also be a valuable element in determining the cost of operating a lab versus a regular-type classroom. Further, it can be perhaps the most vital element combined with estimates of

inflationary costs, use in salary levels, etc., in estimating the cost of particular academic programs in the immediate years ahead.

PART III: STEPS TOWARD IMPLEMENTATION OF MIS AND PPBS

The State of Connecticut is developing the PPBS system. The formulization of a program structure for each State agency has occurred. In public higher education, steps are being taken by the Commission for Higher Education as well as the State Data Center staff to develop uniformity in program structure, at least to the points of capability and content.

Within the Community College System, one of our next important steps is to build a compatible system among the twelve colleges. The Associate Executive Officer for Development and Administration for the system, Dr. Kenneth Summerer, is in charge of this process. Other staff members of the central office and various college representatives are now assisting him.

In the fall of 1972 we hope to take three of our Community Colleges through the stage of a student information bank, followed by a faculty information bank by the spring of 1973. Then in the fall of 1973, for 1973-74 on, we will operate a compatible system for student and faculty information. Meanwhile, additional

developments with PPBS State budgeting efforts will cause us to advance our budget-making and cost analysis procedures so that by 1974-75 we may be able to achieve the first operational year on MIS-PPBS system-wide. Obviously, important refinements will need to occur within the next few years.

Currently, the Commission for Higher Education staff, with the assistance of a staff member from each major unit of public higher education (and some input from private colleges) in Connecticut is developing a master plan for a management information system for all of public higher education in the state. This plan is being developed on a pyramid concept whereby information will be consolidated and summarized as it moves upward from each college unit.

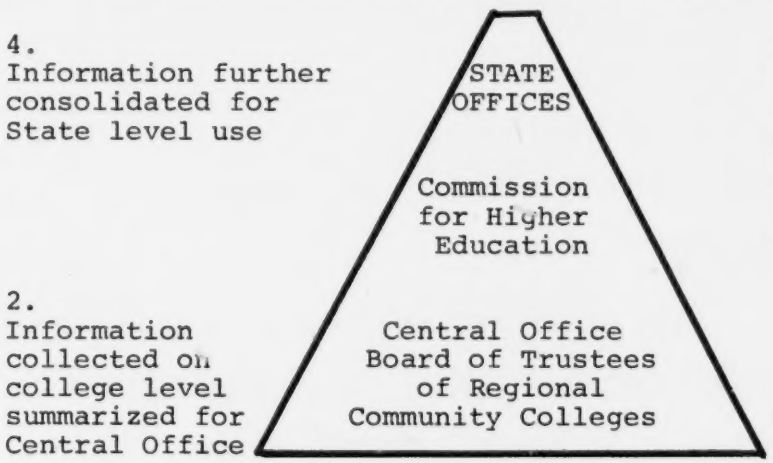
4.
Information further consolidated for State level use
STATE OFFICES
Commission for Higher Education
3.
Central Office information consolidated for the Commission for Higher Education
2.
Information collected on college level summarized for Central Office
Central Office Board of Trustees of Regional Community Colleges
1.
Colleges collect detailed information for their own use, as well as for the system
INDIVIDUAL COLLEGE UNITS

Fig. 1
PYRAMID CONCEPT

Experience has shown that detailed data needed by each college and/or by the Central Office for each system of public colleges (State Technical Colleges--4, Regional Community Colleges--12, State Colleges--4, and the University of Connecticut) is not necessarily needed or desired by State agencies such as the Department of Finance and Control. Thus refinement and selection is required at each level progressing from the college to the different state agencies.

The Commission for Higher Education has a target date of December, 1973, for completion of the MIS program for higher education. Obviously, what developments occur within the Community Colleges in the meantime must fit reasonably well within the plans and program developed. There are procedures in operation to provide for the necessary coordination.

Dr. Summerer is optimistic that with the help of three of our colleges during 1972-73, we can do tentative cost analysis studies during the early summer of 1973. Manchester, Middlesex and Greater Hartford Community Colleges are the three colleges identified at this time to participate in the process of cost analysis of programs and curricula. We plan to hold several one-day workshops among various community college staff in

Connecticut during 1972-73. This is easier than in many other states since driving time for any person so involved is not over one and one-half hours one way. Most of the colleges have one or more persons reasonably well-acquainted with data processing. Eleven colleges are using it for registration and some related functions.

We are pressing for the concept that the Commission for Higher Education should have a central computer service for all public higher education (except the University of Connecticut) in the state for all future State statistical and budget information and preparation. We are not as yet certain if this will be the case, as the State government has not made a final commitment to this approach. If it does develop, we would then tie in our colleges with terminals, thereby selecting data processing equipment needed to support this and as needed for instruction. This would curtail costs for our system; it would also allow us to operate an MIS for our own needs with reasonable likelihood of sufficient time with the terminal and computer bank to get information as we might need it.